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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,322	07/10/2006	Luis Santos Lopez	U 015944-3	1762
140	7590	06/05/2007		
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			EXAMINER MAYO III, WILLIAM H	
			ART UNIT 2831	PAPER NUMBER
			MAIL DATE 06/05/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/550,322

Applicant(s)

SANTOS LOPEZ ET AL.

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 4-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on February 12, 2007. These drawings are not approved because Figure 1 lacks the proper cross-hatching which indicates the type of materials, which may be in an invention. Specifically, the cross hatching to indicate the conductive and insulative materials is improper. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials. Correction is required.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use

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thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

3. In lines 2-3, the abstract refers to purported merits or speculative applications of the invention, which is improper content for the abstract. The applicant should delete the references to purported merits or speculative applications of the invention to provide the abstract with proper content.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
7. Claims 1-2, 4-6, and 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rost (Pat Num 2,123,746) in view of Applicant's Own Admission of Prior Art (herein referred to as AOAPA). Rost discloses a metallic conductor (Figs 1-3) for electrical cable (Col 1, lines 1-4). Rost discloses a metallic conductor (Figs 1-3) for electrical cable (Col 1, lines 1-4). Specifically, with respect to claim 1, Rost discloses a metallic conductor (1b) comprising a collected assembly of wires (Fig 3), wherein the conductor (1b) assumes a polygonal cross section comprising at least one curved side (Fig 3). With respect to claim 2, Rost discloses that the polygonal cross section comprises at least one straight side (Fig 3). With respect to claim 3, Rost discloses that the polygonal cross section comprises at least one straight side and one curved side (Fig 3). With respect to claim 4, Rost discloses that the polygonal cross section is a circular sector (Fig 3). With respect to claim 6, Rost discloses that the conductor (1b) is

surrounded by a layer of insulating material (2b). With respect to claim 7, Rost discloses that the insulating material (2b) may be may of thermoplastic material comprising vinyl compound (Col 2, lines 10-29). With respect to claim 8, Rost discloses an electrical cable (Fig 3) comprising a plurality of conductors (1b), wherein the conductors (1b) are insulated from each other by an insulating material (2b) and grouped together by a cabling process under a covering (3b), wherein the conductors (1b) assume a predetermined polygonal arrangement comprising a curved side (Fig 3). With respect to claim 9, Rost discloses that the polygonal cross section comprises at least one straight side (Fig 3). With respect to claim 10, Rost discloses that the polygonal cross section comprises at least one straight side and one curved side (Fig 3). With respect to claim 11, Rost discloses that the polygonal cross section is a circular sector (Fig 3). With respect to claim 14, Rost discloses that the polygonal arrangement is surrounded by a metallic protective material (4b & 5b). With respect to claim 15, Rost discloses that the protective material (4b) is a metallic protective material (Col 4, lines 3-4). With respect to claim 16, Rost discloses that the protective material (5b) may be a thermoplastic protective material (i.e. insulating layer, Col 4, lines 5-10). With respect to claim 18, Rost discloses that the polygonal arrangement is surrounded by a combination of protective materials (4b & 5b). With respect to claim 19, Rost discloses a method of forming a metallic conductor comprising a collected assembly of wires (Fig 3), wherein the conductor (1b) assumes a polygonal cross section comprising at least one curved side (Fig 3) deforming, using a mechanical means of deformation (i.e. extruder), of the metallic conductor (1b) comprising a plurality of round metallic

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wires (not numbered) to form a polygonal cross section, and extruding an protective covering (4b & 5b) around the metallic conductor (1b) in a preceding operation (Col 1, lines 1-35).

However, Rost doesn't specifically disclose the wire being flexible (claim 1), nor the diameter of each wire being 0.61mm (claim 5), nor the polygonal arrangement being rectangular (claim 12), nor the conductor comprising different polygonal cross sections (claims 13 & 20), nor the cable being flexible to meet classes V & VI of IEC-60228 standard (claim 21), nor the cable being sufficiently capable of being coiled on a spool (claim 22).

AOAPA teaches that multicore cables are commonly utilized as carrying power signals. Specifically, with respect to claims 1, 5, 12-13, and 20-22, AOAPA teaches that multi-core cables are commonly flexible because each multi-wire conductor is composed of flexible conductors having a diameter of less than 0.61mm in accordance with the requirements of classes V & VI of IEC-60228 standard and therefore inherently being able to be coiled on a spool, and wherein the insulated conductors are commonly formed utilizing different configurations such as triangular configurations (See paragraph 4 & 5 under Characterization of Invention).

With respect to claims 1 and 21-22, it would have been obvious to one of ordinary skill in the art of cables to modify the conductors of Rost to be flexible as taught by AOAPA because AOAPA teaches that such a configuration is commonly utilized as power carrying conductors (paragraph 3).

With respect to claim 5, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the metallic wire of Rost to comprise the diameter of each wire being 0.61mm, as taught by AOAPA, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With respect to claims 12-13 and 20, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the polygonal arrangement to comprise a rectangular shape and the conductor to comprise various different polygonal cross sections since it has been held that a change in form cannot sustain patentability where involved is only extended application of obvious attributes from a prior art. *In re Span-Deck Inc. vs. Fab-Con Inc.* (CA 8, 1982) 215 USPQ 835.

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chase (Pat 1,370,731) in view of Applicant's Own Admission of Prior Art (herein referred to as AOAPA). Chase discloses a metallic conductor (Fig 8) for electrical cable (Col 1, lines 9-11). Specifically, with respect to claim 1, Chase discloses electrical cable (Fig 8), consisting of a plurality of metallic conductors (61), each of the conductors (61) comprising insulation layer (62), wherein the conductor (61) and insulation layer (62) assumes a polygonal cross section comprising at least one curved side (Fig 8) and a protective sheath (68) covering the plurality of insulated conductors (61 & 62, respectively).

However, Chase doesn't specifically disclose the conductor being made of a plurality of flexible wires nor the cable being flexible (claim 23).

AOAPA teaches that multicore cables are commonly utilized as carrying power signals. Specifically, with respect to claim 23, AOAPA teaches that multi-core cables are commonly flexible because each multi-wire conductor is composed of plurality of flexible wires having a diameter of less than 0.61mm in accordance with the requirements of classes V & VI of IEC-60228 standard and therefore inherently being able to be coiled on a spool, and wherein the insulated conductors are commonly formed utilizing different configurations such as triangular configurations (See paragraph 4 & 5 under Characterization of Invention).

With respect to claim 23, it would have been obvious to one of ordinary skill in the art of cables to modify the conductors of Chase to be flexible as taught by AOAPA because AOAPA teaches that such a configuration is commonly utilized as power carrying conductors (paragraph 3).

Response to Arguments

9. Applicant's arguments with respect to claims 1-2 and 4-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

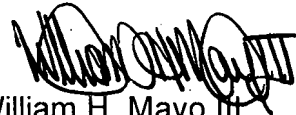
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone

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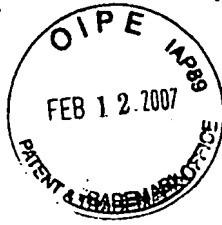
number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
May 27, 2007



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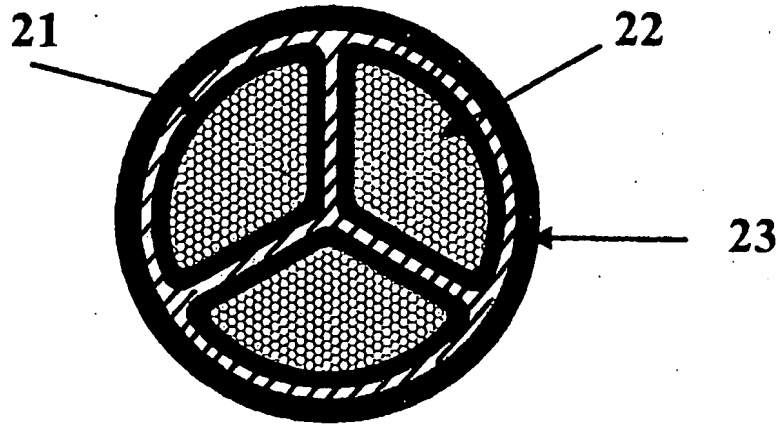


FIGURE 1

NOT
APPROVED
WJH/MTJ
8/27/07